PD-300 SERIES
2 X 20 LCD
CUSTOMER DISPLAY

Rev. D0

PD302

PD303

PD305

PD306/U

PD307/U

PD308/U

FCC Notes:

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with limits for a Class A digital device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures to correct the interference.

Warranty Limits:

Warranty terminates automatically when any person other than the authorized technicians opens the machine. The user should consult his/her dealer for the problem happened. Warranty voids if the user does not follow the instructions in application of this merchandise. The manufacturer is by no means responsible for any damage or hazard caused by improper application.

About This Manual:

Posiflex has made every effort for the accuracy of the content in this manual. However, Posiflex will assume no liability for any technical inaccuracies or editorial or other errors or omissions contained herein, nor for direct, indirect, incidental, consequential or otherwise damages, including without limitation loss of data or profits, resulting from the furnishing, performance, or use of this material.

This information is provided “as is” and Posiflex Technology, Inc. expressly disclaims any warranties, expressed, implied or statutory, including without limitation implied warranties of merchantability or fitness for particular purpose, good title and against infringement.

The information in this manual contains only essential hardware concerns for general user and is subject to change without notice. Posiflex Technology, Inc. reserves the right to alter product designs, layouts or drivers without notification. The system integrator shall provide applicative notices and arrangement for special options utilizing this product. The user may find the most up to date information of the hardware from web sites: http://www.posiflex.com or http://www.posiflex.com.tw

All data should be backed-up prior to the installation of any drive unit or storage peripheral. Posiflex will not be responsible for any loss of data resulting from the use, disuse or misuse of this or any other Posiflex product.

All rights are strictly reserved. No part of this documentation may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, or otherwise, without prior express written consent from Posiflex Technology, Inc. the publisher of this documentation.

© Copyright Posiflex Technology, Inc. 2011

All brand and product names and trademarks are the property of their respective holders.

FEATURES

- Two - line LCD display with 20 characters per line.
- Dark blue character with yellow green back-light
- Easy viewing characters (6.0 mm by 9.66 mm)
- Display area 143 mm by 21 mm
- Euro dollar sign supported in USA/European font table
- Selectable command emulation modes including PST and EPSON command emulation modes
- Long life, trouble free and user friendly operation
- Composed of several members in the family for versatile applications as tabulated below

MODEL NUMBERS

MODEL	I/F	TILT ADJ.	APPLICATION
PD-300	RS232	15°, 30°, 45°	Stand alone
PD-300U	USB	15°, 30°, 45°	Stand alone
PD-302	RS232	N. A.	Rear-top mount to TP series
PD-303	RS232	0° to 90°	Stand alone low profile
PD-305	RS232	0° to 90°	Rear-base low profile to TP/KS series
PD-306	RS232	15°, 30°, 45°	Rear-base pole mount to TP/KS series
PD-306U	USB	15°, 30°, 45°	Rear-base pole mount to TP/KS series
PD-307	RS232	15°, 30°, 45°	Rear-base pole mount to HT/PB series
PD-307U	USB	15°, 30°, 45°	Rear-base pole mount to HT/PB series
PD-308	RS232	15°, 30°, 45°	Rear-base pole mount to FT series
PD-308U	USB	15°, 30°, 45°	Rear-base pole mount to FT series

INSTALLATION GUIDE

POWER PREPARATION

FOR PD-300, PD-300U:

For these models of customer display it need to be powered by a separate power adaptor. Therefore there is no need for any operation in the POS host system. The power adaptor for PD-300 supplies 12VAC, the power adaptor for PD-300U can either be the 12V AC one or the + 24V DC power adaptor for Posiflex POS printer and to support the printer through use of on option cable.(P/N: 21863250900)

FOR PD-302, PD-305, PD-306, PD-307, PD-308:

For these models of customer displays to be used in Posiflex touch terminal systems, the internal jumpers of the touch system should be modified to provide **+ 5 V DC** power to the customer display through the specific Part 3

interface cable to support the operation of the customer display. For PD-302, please separate the main unit of host system (TP series) from the base and open the service window on back of main unit as described in User's Manual of the system. Have a qualified electronic technician to adjust during power off the internal jumper in service window to **supply 5 V DC** to the COM port selected for the customer display following guide from relevant technical manual. For PD-305 and PD-306, same operation as for PD-302 is required for the host system (KS or TP series). For PD-307, a qualified electronic technician will be required to open the top cover of the base (main) unit of HT or PB series host system during power off to adjust the internal jumper to **supply 5 V DC** to the COM port selected for the customer display following guide from relevant technical manual. For PD-308, a qualified electronic technician will be required to open the base unit of FT series host system during power off to adjust the internal jumper to **supply 5 V DC** to the COM port selected for the customer display following guide from relevant technical manual.

FOR PD-303:

There are 2 cables from the PD-303 for application in a host computer system as shown in the right picture. The cable with a DB9 female connector is for connection to the COM port of the system for data transmission. Plug the male/female connector pair of the other cable in between PS/2 KB and KB port of the host computer system for power support.

FOR PD-306U, PD-307U, PD-308U:

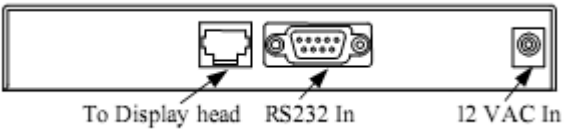
The power for the USB interface type pole display is supported through the USB connection. Therefore there is no need for any operation in the FT series host system. However, should these customer displays are to be connected through an USB HUB instead of a direct USB port of the system, the HUB must be powered by a separate power adaptor otherwise there could be the power shortage problem.

PHYSICAL INSTALLATION

PD-300, PD-300U:

In base of stand alone models, looking from rear side of the bottom, the connector area will look like below:

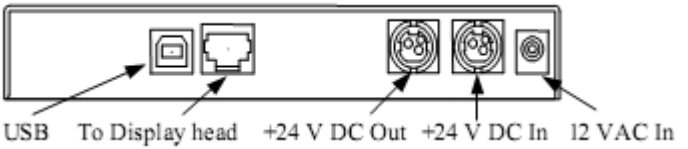
For PD-300 model:



The RJ45 type modular connector is for internal use and is already

occupied. The RS232 input port is a DB9 female connector. Connect the attached RS-232 signal cable to this port and one of the COM port in the host system. Set the RS-232 communication protocol for this port to 9600 bps, no parity, 8 bits, 1 stop bit with hardware handshaking. Connect the power adaptor to the rightmost power connector. Turn on the switch in the front side of the base.

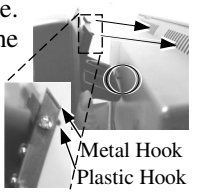
For PD-300U model:



The RJ45 type modular connector is for internal use and is also already occupied. Connect the "B" type connector of the interface cable to "USB" in connector area and the "A" type end to USB port of the host. Insert the 2 pin or 3 pin power connector from either 12 V AC or +24 V DC power adaptor to the"12 V DC In" or "+24 V DC In" jack in the connector area. Insert either end of the power cable to "+24 V DC Out" jack in the connector area and insert the other end to the power connector of Posiflex POS printer if needed. Be sure to hear a click at each connection to obtain a firm contact. You may now place the base on a horizontal surface and prepare to power on and adjust the direction of the display head for best viewing effect in application.

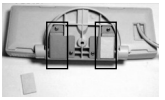
PD-302:

1. Aim the bottom center cavity of PD302 series toward the latch stub at rear of TP series main unit as circled in the right picture. Then aim both metal and plastic hooks at rear of the PD302 series toward the suitable ventilation openings on top rear of the main unit. Please use a phillips head ("+" sign) screw driver to fasten the screws on the metal hook but not to overdo it so that the metal hooks hold the ribs of the ventilation holes from inside.



2. Plug the DB9 female connector to the COM port with power DC supply from the TP series. Please remove the COM1 terminator and save it at a safe place for future use if COM1 is to be used for PD302.
3. Route the cable to go through the notch on back of the stand assembly of touch terminal as indicated in the picture. Reassemble the main unit and stand assembly. (**Guidance for future un-installation:** Please use screw driver to release the metal hook before removing PD302 from the ventilation holes.)

PD-303:



1. Adhere the two pieces of EVA tape on the metal plates at bottom as indicated in picture at right. Peel off the protective covers of the tape to stick PD303 series on a flat and clean surface.

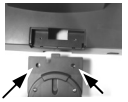
2. Apply the screws at 2 arrows in the right picture for firm fixation on counter if necessary.

PD-305, PD-306, PD-306U:

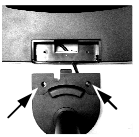
1. Remove rear connect cover of the KS or TP series terminal system from the base per instruction of the terminal system.

2. Have the cable of PD-305, PD-306 or PD-306U that comes out of its base joint to enter the base of host system through the cable exit so to connect to the main unit.

Cable Exit



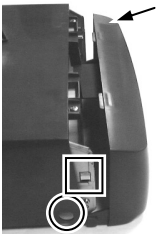
PD-305



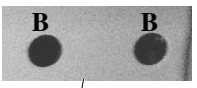
PD-306

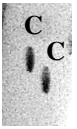
3. Match the base joint of PD-305, PD-306 or PD-306U to the system rear connect area Fit 2 screws **through washers** at arrowed points in the right pictures to hold the joint tight.

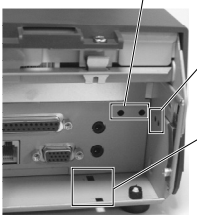
PD-307, PD-307U:

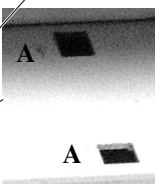


1. For ease of PD-307 / PD-307U installation operation, the HT main unit or PB system has to be opened with sufficient precautions. First push in the circled knobs on both sides as in the right picture to remove the back cover. Take out the arrow pointed pole cover from it.
2. Prepare a piece of clean soft clothe of appropriate size in front of the HT system to prevent damage to the display panel. Turn the display panel to straight up position. For both HT and PB system, push in the rectangular marked spring button in the same picture mentioned above on both sides of chassis and raise the rear edge of the top cover. The COM port DC support for PD-307 can be set at this moment.



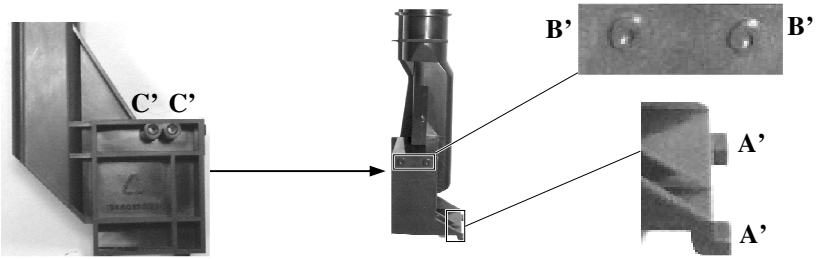




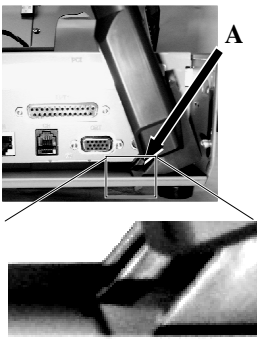


3. Refer to the picture at right of the HT or PB chassis near the right bottom corner (as you are facing the HT or PB system from its back) with 3 enlarged portions around, please find 2 rectangular PD installation holes **A** on the bottom chassis; 2 circular locating holes **B** on I/O plate; and 2 circular screw holes **C** on metal sidewall.

4. Please then refer to the pictures below for the base unit (lowest part) of PD-307 / PD-307U with 2 enlarged portions to the right and a slightly enlarged side view picture to the left to find 2 bottom locking lugs **A'**; 2 short cylindrical locating bosses B' to fit into I/O plate; and 2 plastic screw bosses **C'** on side. Please note that the PD cable comes out of the bottom end of the base tube yet in the illustration pictures the cable is eliminated for sake of minimum visual confusion.

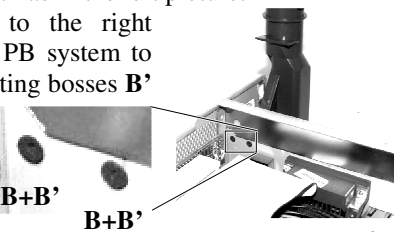


5. Turn the pole display base unit opposite to have the bottom locking lugs **A'** facing left and now insert the 2 bottom locking lugs **A'** on base unit into the 2 rectangular installation holes **A** on bottom of HT or PB chassis from the right corner with the pole display slightly inclined to the left as in the upper picture at right. Please note that both bottom locking lugs **A'** should be completely inserted and come out of the bottom plate of HT or PB system as emphasized by an arrow in the enlarged portion in lower right.

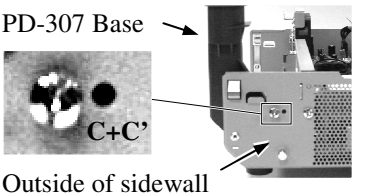


6. Please always keep a gentle pressure at the bottom end of pole base (bottom locking lugs **A'**) to the left (away from the sidewall of system chassis) when moving the upper part of pole toward sidewall as in the left picture.

7. Please refer to the right picture taken from inside of HT or PB system to show that the 2 short cylindrical locating bosses **B'** should match into 2 round holes **B** in the I/O plate. The bosses B' inside holes B are show in the enlarged portion.



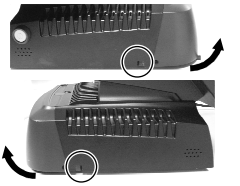
8. Please note the importance of keeping the leftward pressure on bottom end of pole display during the process of turning the pole upright and inserting the locating bosses **B'** or even when you want to release the locating bosses **B'** away from I/O plate **B** and turn the upper end of pole display to left to remove the locking lugs **A'** from bottom chassis **A**. Ignorance of this point may damage or even break off the locking lugs **A'** due to improper torque applied.
9. The screw bosses on base of PD-307 / PD-307U should now align with the screw holes on sidewall of system chassis. Only 1 screw needs to be applied. Use the self-tapping screw that comes with PD-307 to fix from external side of sidewall as demonstrated in the right picture.

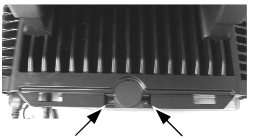


10. Carefully close back the top cover of HT or PB system and connect the interface cable of PD-307 or PD-307U to appropriate port in system connector area. Then close the back cover of the system.

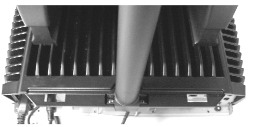
PD-308, PD-308U:

1. To install PD-308 or PD-308U onto FT series host system, the back cover of FT system base has to be opened. First push in the circled knobs on both sides as in the right pictures to remove the back cover.





2. Remove the pole cover on rear edge of the base top cover of FT system by first removing the 2 arrowed screws in the left picture and then pushing the wedge shaped pole cover up.
3. Insert the base of PD-308 / PD-308U from top of FT system base and screw back the 2 screws as in the right picture. Connect the interface cable to appropriate port.

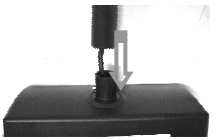


Stand Alone Model:

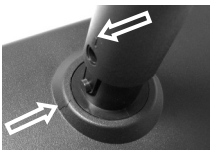
This instruction is for stand alone model only. Please unpack the inner box of pole display and it easy to find the base, display unit with tube and adaptor separately. Please remove the PE foam and bring out the components carefully.

Firstly, place the display head and tube on a flat

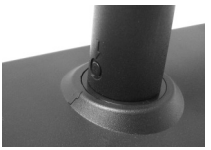
surface and find the cable which in the end of tube. Let this cable pass through the short tube which on the base stand and it shows in the picture at right.



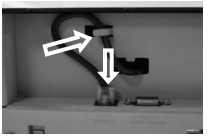
Next, please assemble the display head with tube to the base stand which shows in the right picture. Please pay more attention during the process since there is a hole and a compression lock which are in the two side of tube and marked arrow signs. Aim these two arrow signs nearby compression lock to the holes and push the tube to the end. After hear the "click" sound, the assembly is complete.



Once combine the display head with tube and base stand, please place the pole display as a horizontal position which can easily to check the bottom plate.



Please plug the cable to the connector which showing "To Display" and route the cable as arrowed in the right picture.



DRIVER INSTALLATION

FOR RS-232 INTERFACE MODELS:

For direct I/O control over the serial interface (RS232) models, you have to send all commands (listed later in this manual) under communication protocol 9600 bps, none parity, 8 data bits, 1 stop bit with hardware handshaking on CTS signal to the COM port used. No other driver installation is required.

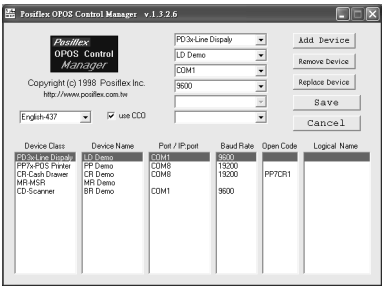
FOR USB INTERFACE MODELS:

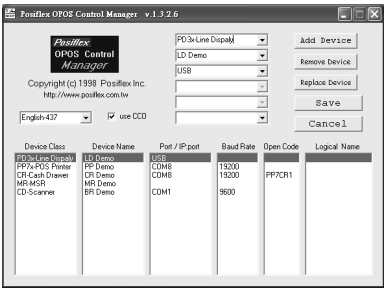
Copy the driver and library from Posiflex Product Information CD under \Drivers\PD23_26U to your system or download from web site http://www.posiflex.com.tw/Download%20list.asp?Status=1&Series_Name=PD%20Series&Model_Name=PD-2300U. Follow instructions given in the file "README.TXT" to send commands (listed later in this manual) and data to the customer display under the programming language.

FOR OPOS APPLICATION:

Find the subfolder \Drivers\UPOS\OPOS of the Posiflex Product Information CD or download it from web site http://www.posiflex.com.tw/Download%20list.asp?Status=1&Series_Name=UPOS&Model_Name=OPOS and execute the file "SETUP.EXE" to install the

OPOS Control Manager. To add the customer display under OPOS control please set in OPOS Control Manager device name “PD3x-Line Display” in the top row. For RS-232 models, select the COM port in the 3rd row and set baud rate to “9600” in 4th row as in the left sample screen below. Select “USB” in 3rd row for USB interface models as in the right sample picture below.





SPECIFICATIONS

ITEM	SPECIFICATION
Display type	LCD, STN positive transflective with back light
Number of digits	20 digits/row, 2 rows
Character color	Dark blue
Back light color	Yellow green
Wave length	570 nm
Max. brightness	150 cd/m^2
Active display area	142.8 mm (W) x 20.64 mm (H)
Character height	9.66 mm
Character width	6.0 mm
Character pitch	7.2 mm (H) x 10.98 mm (V)
Dot size	1.12 mm (H) x 1.12 mm (V)
Dot pitch	1.22 mm (H) x 1.22 mm (V)
Display head size for PD-302 /-303 / -305 PD-306 ~ 308	 217 mm (W) x 80.5 mm (H) x 28.5 mm (D) 196.7 mm (W) x 57.5 mm (H) x 39.6 mm (D)
Pole height (PD-306 ~ 8)	200 mm
Input power type	DC
Input voltage	+ 5 V
Current consumption	500 mA max.
Operation temperature	0ºC ~ +50ºC (+32ºF ~ +122ºF)
Storage temperature	-10ºC ~ +60ºC (+14ºF ~ +140ºF)

POSIFLEX T31454

警告使用者

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。